

DECLARATION

We, Lanny D. Schmidt, Jakob J. Krummenacher, and Kevin N. West, declare that: (1) our respective citizenships and residence/mailling addresses are indicated below; (2) we have reviewed and understand the contents of the specification identified below, including the claims, as amended by any amendment specifically referred to herein, (3) we believe that we are the original, first, and joint inventors of the subject matter in

CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS

Filing Date: Herewith

Serial No.: Unassigned

described and claimed therein and for which a patent is sought; and (4) we hereby acknowledge our duty to disclose to the United States Patent and Trademark Office all information known to us to be material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56.*

We hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate listed below, or §365(a) of any PCT international application which designates at least one country other than the United States of America listed below, and have also identified below any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on the basis of which priority is claimed:

- a. ☒ no such applications have been filed.
 b. ☐ such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC §119(a)-(d), §365(a), and/or §365(b)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

ALL FOREIGN APPLICATIONS, IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

* Title 37, Code of Federal Regulations, §1.56 is reproduced on the attached page.

Declaration

Serial No.: Unassigned

Filing Date: Herewith

Title: CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS

We hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional application(s) listed below.

- a. ☐ no such applications have been filed.
b. ☒ such applications have been filed as follows:

PROVISIONAL APPLICATION(S), IF ANY, UNDER 35 USC §119(e)	
APPLICATION NUMBER	DATE OF FILING (day, month, year)
60/426,328	13 November 2002

We hereby claim the benefit under Title 35, United States Code, §120 of any United States applications or §365(c) of any PCT international application(s) designating the United States of America, listed below.

- a. ☒ no such applications have been filed.
b. ☐ such applications have been filed as follows:

APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

Insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of Title 35, United States Code, §112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

The undersigned declare further that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

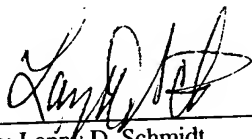
Wherefore, we pray that Letters Patent be granted to us for the invention described and claimed in the specification identified above and we hereby subscribe our names to the foregoing specification, claims, and Declaration, on the date indicated below.

Declaration

Serial No.: Unassigned

Filing Date: Herewith

Title: CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS

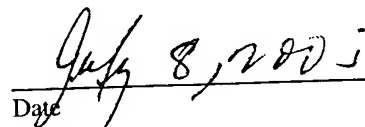


Name: Larry D. Schmidt

Citizenship: United States of America

Residence: 4852 13th Avenue So., Minneapolis, MN 55417

Mailing Address: (same)


Date

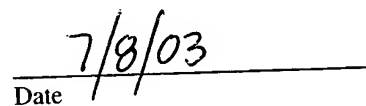


Name: Jakob J. Krummenacher

Citizenship: Switzerland

Residence: 320 7th Street SE, Apt. 304, Minneapolis, MN 55414

Mailing Address: (same)


Date

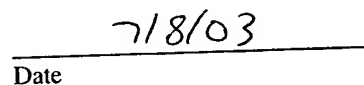


Name: Kevin N. West

Citizenship: United States of America

Residence: 217 Ridgewood Avenue, Apt. 105, Minneapolis, MN 55403

Mailing Address: (same)


Date

Declaration*Serial No.: Unassigned**Filing Date: Herewith**Title: CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS***§ 1.56 Duty to disclose information material to patentability.**

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) Prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
 - (i) Opposing an argument of unpatentability relied on by the Office, or
 - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): SCHMIDT et al.)	Group Art Unit:	Unassigned
)		
Serial No.: Unassigned)	Examiner:	Unassigned
Confirmation No.: Unassigned)		
)		
Filed: Herewith)		
)		
For: CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS)		

**ELECTION UNDER 37 C.F.R. §3.71, REVOCATION,
POWER OF ATTORNEY, AND CERTIFICATE UNDER §3.73(b)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Assignee Regents of the University of Minnesota of the entire interest in the above-identified application hereby elects, under 37 C.F.R. §3.71, to prosecute the application to the exclusion of the inventors.

The Assignee hereby revokes any previous Powers of Attorney and appoints:

Adams, Matthew W.	Reg. No. 43,459
Albin, Loren D.	Reg. No. 37,763
Franklin, Kathleen L.	Reg. No. 47,574
Gebhardt, Mark J.	Reg. No. 35,518
Johnson, Nancy A.	Reg. No. 47,266
Muehling, Ann M.	Reg. No. 33,977
Provence, David L.	Reg. No. 43,022
Raasch, Kevin W.	Reg. No. 35,651
Sandberg, Victoria A.	Reg. No. 41,287

as its attorney or agent (with full powers of appointment, substitution and revocation) to prosecute the application, and any division, continuation, continuation-in-part, reexamination or reissue thereof, to make alterations and amendments therein, and to transact all business in the Patent and Trademark Office in connection therewith, and to receive any Letters Patent.

Election Under 37 C.F.R. §53.71, Revocation, Power of Attorney and Certificate under §3.73(b)
Serial No.: Unassigned
Confirmation No.: Unassigned
Filed: Herewith
Title: CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS

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Please send correspondence to the following address:

Attention: Ann M. Muetting
Muetting, Raasch & Gebhardt, P.A.
P.O. Box 581415
Minneapolis, MN 55458-1415
Customer Number 26,813



26813

PATENT TRADEMARK OFFICE

Statement under 37 C.F.R. §3.73(b)

Regents of the University of Minnesota states that it is the assignee of the entire right, title and interest in the above-identified patent application by virtue of assignment from the inventors of the above-identified patent application to Regents of the University of Minnesota. A copy of the assignment is attached. The assignment has been or is concurrently being recorded with the U.S. Patent and Trademark Office.

The undersigned (whose title is supplied below) is empowered to sign this document on behalf of the Assignee.

ASSIGNEE:

Regents of the University of Minnesota

14 July 2003
Date

Beth Trend
Signature

Beth Trend
Typed or Printed Name

Director
Title

ASSIGNMENT

Whereas We, Lanny D. Schmidt, Jakob J. Krummenacher, and Kevin N. West, with residences and citizenships as indicated below; have made an invention in

CATALYTIC PARTIAL OXIDATION OF HYDROCARBONS

Provisional Application Serial No.: 60/426,328
U.S. Patent Application Serial No.: Unassigned

Provisional Filing Date: 13 November 2002
Filing Date: Herewith

and executed an application for Letters Patent of the United States of America based thereon:

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto Regents of the University of Minnesota ("Company"), a corporation of Minnesota, having its principal office at 450 McNamara Alumni Center, 200 Oak Street SE, Minneapolis, Minnesota 55455-2070, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to Regents of the University of Minnesota as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

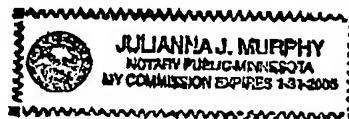
Lanny D. Schmidt
Name: Lanny D. Schmidt
Address: 4852 13th Avenue So., Minneapolis, MN 55417
Citizenship: United States of America

July 8, 2003
Date

STATE OF MINNESOTA)
) ss.
COUNTY OF HEMNEN)

On this 8th day of JULY, 2003, before me personally appeared Lanny D. Schmidt, to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

Julianne J. Murphy
Notary Public



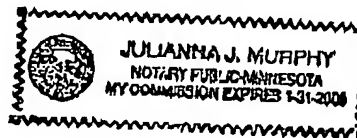
[Signature]
Name: Jakob J. Krummenacher
Address: 320 7th Street SE, Apt. 304, Minneapolis, MN 55414
Citizenship: Switzerland

7/8/03
Date

STATE OF MINNESOTA)
COUNTY OF HENNEPIN) ss.

On this 8TH day of JULY 2003, before me personally appeared Jakob J. Krummenacher, to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

[Signature]
Notary Public



[Signature]
Name: Kevin N. West
Address: 217 Ridgewood Avenue, Apt. 105, Minneapolis, MN 55403
Citizenship: United States of America

7/8/03
Date

STATE OF MINNESOTA)
COUNTY OF HENNEPIN) ss.

On this 8TH day of JULY 2003, before me personally appeared Kevin N. West, to me known to be the person described in and who executed the foregoing instrument, and he/she executed the same for the uses and purposes therein set forth.

[Signature]
Notary Public

